

**Change Management: How to Transform from an
All-Career into a Combination Fire Department**

Executive Management of Change

By: Stephen C. O'Connor
Muscatine Fire Department
Muscatine, Iowa

An applied research project submitted to the National
Fire Academy as part of the Executive
Fire Officer Program

January 1998

Abstract

The problem this research study addresses is how the Muscatine Fire Department could make the transformation from an all-career fire department into a combination fire department through the addition of volunteers. The purpose of this research is to evaluate the process and procedures fire departments have gone through in implementing volunteers into previously all-career fire departments.

This study utilized evaluative research supported by historical and descriptive research to answer the following questions:

- What fire departments in the state of Iowa have gone from an all-career department into a combination department?
- What other states' fire departments have gone from an all-combination department?
- What were the procedures used to make the transformation into a combination department?
- What were some of the problems encountered during the transformational change?

The uses of evaluative research supported by historical were utilized to obtain information pertaining to this problem. The research also included descriptive research through the use of the survey instrument. The results of this research identified the fire departments which had previously made the transformational change, procedures it used in making the change, and problems it encountered.

This research recommends that if the Muscatine Fire Department is faced with future budget cuts in the area of 10% or greater, the department should transform from an all-career fire department into a combination fire department through the addition of volunteer fire fighters by utilizing the "Change Management Model."

TABLE OF CONTENTS

ABSTRACT.....	2
INTRODUCTION.....	5
BACKGROUND AND SIGNIFICANCE.....	6
LITERATURE REVIEW	8
PROCEDURES	13
RESULTS	16
DISCUSSION	22
RECOMMENDATIONS.....	25
REFERENCE LIST.....	27
APPENDIX (Executive Fire Officer Questionnaire).....	29

Introduction

Many fire departments throughout this country are faced with expectations of "doing more with less." Reduced taxation and other economic pressures have had a profound effect on many of these departments, especially departments with all-career personnel.

This research paper utilizes the Analysis Phase of the National Fire Academy's "Change Management Model" to explore the problem of how to make the transformation from the Muscatine all-career fire department into a combination fire department through the addition of volunteer (paid-on-call) fire fighters.

The purpose of this research is to evaluate the process and procedures fire departments have gone through in implementing volunteers into previously all-career fire departments.

The use of the evaluative research methodology supported by historical and descriptive research methods were utilized by the author to answer the following questions:

1. What fire departments in the State of Iowa have gone from an all-career department to a combination department?
2. What other states' fire departments have gone from an all-career department to a combination department?
3. What were the procedures used to make the transformation combination department?
4. What were some of the problems encountered during the transformational change?

Background and Significance

Money, or lack thereof, has become a major concern to the city officials in the community of Muscatine, Iowa. Muscatine's estimated population in 1994 was 23,935 (Solt, 1995). The property tax on industrial machinery and equipment (M & E) has been the fastest growing revenue source for Muscatine over the last three years (Brecht, 1998b). In 1995, the State of Iowa's Legislature voted to phase out, over a ten-year period, the M & E tax (Special Tax Provision Act, 1997). The loss of revenue would have a profound impact on the city's local budget.

Property taxes generate approximately half of the City of Muscatine's general fund revenue. According to the Muscatine 1995/96 General Fund Budget Summary, property tax revenue accounted for \$4,389,313 out of a total general fund revenue of \$9,222,927. Not included in the general fund were capital revenue, debt service, enterprise funds, and other sources bringing a total revenue for 1995 to \$20,422,085.

Property taxes had been divided into five classifications: residential, commercial, industrial, M & E tax, and utilities. In Muscatine, the M & E tax accounted for 16.3% of the property tax base. Current numbers show the City of Muscatine receives \$1.2 million per year from the M & E tax (Brecht, 1998b).

The state legislature has promised to reimburse local governments 100% of the M & E tax revenue loss for the first five years (1996-2001) of the phase out. Partial reimbursement will be given during the second five years (2001-2006) based on growth in commercial and industrial property valuations. After the year 2006, the M & E tax will cease to exist (Brecht, 1998a).

The intent of the repeal of the state's M & E tax was to promote growth and attract new businesses to the state. Muscatine County was one of only five counties receiving more than 10% or more of its tax base from the M & E tax. Statewide the M & E tax made up 3% or less of the tax base of local governments in 77 of the state's 99 counties (Brecht, 1998b).

According to David Casstevens, Muscatine's Financial Director, the local economy has been strong. However, the actual taxable value has remained relatively flat from 1990-1997. He stated that in excluding the M & E tax, the growth rate in Muscatine over the past ten years was less than 1% per year. He stated this was a double loser due to the growth being too low and Community growth not keeping up with inflation (D. Casstevens, personal interview, March 5, 1998).

Another limitation placed by the state legislature on all city governments is the tax levy cap. "The city tax levy for the general fund shall not exceed eight dollars and ten cents per thousand dollars of taxable value in any tax year . . . " (City Finance Act, 1997). Muscatine has been at the eight dollars and ten cents per thousand cap ever since the law was first adopted.

In January of 1998, the Muscatine City Council hired an outside firm to examine the city's financial situation and to make recommendations of alternative sources of revenue and, if necessary, to suggest how and where to reduce the city budget expenditures. Their first recommendation was for the fire department to take over the ambulance service, potentially generating over \$250,000 per year. If this was not possible, the city should be prepared to reduce its budget by 10%. It also stated that it

may be necessary for the fire department to begin to add volunteers to supplement its work force (Triumph Consulting Inc. 1998).

The Muscatine Fire Department (MFD) consists of 32 all career personnel and no volunteers, currently staffing three shifts of ten personnel each. The Fire Chief and Fire Marshal work a 40-hour week. The MFD respond to all structure fires with two engine companies and one truck company. When fully staffed, there are four personnel on Engine 1, three on Engine 2, and three on the Truck. When at minimum staffing level, the number of personnel responding is reduced to three, two and two respectively.

The fire department also employs a part-time secretary. Personnel costs for the fire department account for 94% of a \$1.5 million budget. The loss of 10% of the fire department's total budget would require the reduction of staffing by a minimum of five persons. Any reduction in shift strength, especially the potential loss of one or more fire fighters per shift, may require a transformational change from a previously all-career fire department into a combination department through the addition of volunteers.

The research problem of how to transform the all-career fire department into a combination department relates directly to the Analysis Phase of determining organizational change requirements found in the "Change Management Model" in the E.O. Strategic Management of Change Course.

Literature Review

"The immediate future for fire service funding is bleak. Many elements are causing this, most of which are tied to the economy" (Rule, 1992). Tax revolts are occurring across the nation. Beginning with California's Proposition 13 in 1978, several states have passed tax cutting legislation that directly affects local government revenue sources (Daniels, 1998). Oregon has rolled back property tax levies by about 17%. Any additional new tax increases, there, requires a 50% voter turnout as well as more than 50% approval of the tax by the voters. As a result of this legislation, Oregon residents have seen the effects of the reduction in tax revenues by the closing of libraries and fire stations (Bruegman, 1998).

The best description of the U.S. economy could be from the insight of philosopher Heraclitus: "All is flux" (Dentzer, 1996, p. 58). Millions of Americans in the private sector have been targets of downsizing. Says Madelyn Jennings, Senior Vice President of Gannett Company: "Employees are running so scared that there is a whole culture that says don't make waves, don't take risks-just at the time when we need innovation" (Castro, 1989, p. 53). As management expert Peter Drucker writes in Managing in a Time of Great Change, "society, community and family are all conserving institutions . . . but the modern organization is a destabilizer" (Dentzer, 1996, p. 58).

Thanks to recent research, we know that our economy has long been a churning ocean where as many as one-fifth of all the tens of millions of jobs have been either newly created or destroyed each year. One of our economy's strengths is that it shuffles labor from fewer productive jobs to more productive ones and away from firms that no longer have a competitive edge to those that do . . . (Dentzer, 1996, p. 58).

Determined to slash labor costs, private companies have discarded traditional notions about job

security, compensation, and seniority. Thousands of factories have either closed or moved operations overseas (Castro, 1989). This has created a sharp decline in the perception of corporate loyalty on both sides. According to a TIME/CAN poll conducted in 1989, 57% of those surveyed said companies are less loyal to employees today than they were a decade ago; while 63% said, workers were less loyal to their firms (Castro, 1989).

Citizens have come to expect their government to function more as a business. Dr. John Brazen wrote:

Too often a distressing equation has operated in the public sector; more money equals more service, and less money equals less service. As public budgets have become increasingly strapped, there has not been enough innovation and public service redesign.

The equation doesn't need to be destiny; it is possible that creative effort and innovation might actually result in more service for less money (Rielage, 1995, p. 73).

Taxpayers are demanding a more accountable and results-oriented government. The book Reinventing Government discusses the concept of "entrepreneurial government": innovative, imaginative and creative ideas communities could use for providing services (Osborne & Gaebler, 1993). Fire departments are faced with decisions of merger, consolidation, reorganization and regionalization. "The combination department may be an answer for the gap between staffing needs and dwindling budgets-even for currently all-career departments" (Rielage, 1995. p. 70).

Due to demographic and financial conditions, some communities that were served by an all-volunteer fire department have considered and implemented the addition of career personnel. At the same time, communities served by an all-career department are considering the addition of volunteers

(Granito, 1980). Red McKeon, chairman of the National Volunteer Fire Council began getting calls in late 1990 to advise on how to transform a paid department into a combination department. The first calls were received from the northeast part of the country, typically from communities with departments of 30 to 40 fire fighters (Baltic, 1992).

Approximately 25% of the fire departments in the United States are some type of combination department (Marinucci, 1990). Personnel costs are the largest element in an all-career fire department's budget (Rule, 1992). There are advantages of having a combination fire department. The per capita cost of delivering fire services are usually lower in combination fire departments than in fully-paid departments (Coleman & Granito, 1988). The services provided by combination departments also are generally viewed as equivalent to that of a fully paid department at a lower cost (Bryan & Picard, 1979). When combination departments have been compared to all volunteer departments, response times tended to be faster and resources for fire prevention and public education activities have been higher in combination departments than those of volunteer departments (Coleman & Granito, 1988).

Another advantage of the inclusion of volunteers would be the quick response of a large labor pool. Questions have been asked throughout the fire service as to how many fire fighters are required to combat a residential structure fire. The consensus was that a minimum of ten fire fighters was necessary to initiate structural fire fighting operations (Carter, 1990). The maximum staffing that Muscatine schedules on duty any given day is ten personnel with a minimum staffing of seven personnel.

The public's acceptance of what type of fire fighter, career or volunteer, should protect their community has received mixed results. Theodore Florian has been quoted as saying: "People don't care about what fire fighters are called or how they are compensated. They want first-class service at

the time of their emergency" (1996, p. 38). Thomas McDermott's EFO research conducted telephone interviews (unknown where) which failed to show any difficulties with the public's acceptance of different types of fire departments.

There are and will continue to be a stream of changes occurring in the fire and emergency services as the result of new trends. A quote from the EFO's Strategic Management of Change textbook summarizes:

The economic facets of operating a business in the private sector are becoming increasingly important in the public sector. Government agencies, who had been somewhat immune from having to show a profit, are faced with the mandate of doing 'more with less' and doing it better and faster. In addition, there is very little preparation time leading up to that directive other than budgets being cut, organizations downsizing and competition increasing. Employment in the public sector is no longer as ironclad and stable as it once was. Agencies are given very little time to adapt, and in many instances, they and their employees are finding themselves having to cope with layoffs, cutbacks, and reorganization (FEMA, 1996, p.1-5).

John Wakeman states, "It is our nature to either revert back to the 'status quo' or to adapt and to do so quickly so that it's no longer a change. My suggestion is to adapt quickly" (1992, p. 5).

Procedures

Definitions

M & E Tax - Machinery and Equipment Tax

Combination Department - department consisting of career and paid-volunteer fire fighters

Volunteer fire fighter - fire fighter who volunteers without pay or paid-per-call at a rate below that of full-time fire fighters

SOP's - Standard Operating Procedures

FF I - Certified Fire Fighter I in accordance with NFPA 1001

Research Methodology

The goal of this research was to gather all available and applicable information to be used by the Muscatine Fire Department in formulating a plan of how to make a transformational change from an all-career fire department into a combination fire department. The research included historical research in that literature review was conducted to obtain information on pertinent tax laws and general private/public business information pertaining to this problem. Information such as articles, books, journals, and previous EFO research papers (no EFO research papers have been written as of yet addressing this specific type of problem) was obtained at the National Fire Academy's Learning Resource Center and Muscatine's Public Library.

The research also included descriptive research through the use of the survey instrument. It included seven questions relating to department size and knowledge of any fire departments that have made a similar change (see Appendix). Question one of the survey dealt with which type of fire department the respondent was associated with. Question two identified the total number of fire

suppression personnel of the respondent's department. Question three identified the population of the area the respondent's department serves. Question four inquires if the respondent's department has made the change from an all-paid department to a combination department. Question five inquires if the respondent's community or department has had any discussion about making a future change from an all-paid department to a combination department. Question six inquires if the respondent is aware of any fire departments that have made the change from an all-paid department to a combination department. Question seven asks the respondent if he or she could envision their department making a change from an all-paid department to a combination department. The survey was conducted at the National Fire Academy in Emmitsburg, Maryland. A total of 136 surveys was administered and returned from the following classes on January 21, 1998:

R 130 Strategic Management of Change

R 331 Organizational Theory in Practice

R 247 Advanced Life Support in Hazardous Materials Incidents

R 308 Command & Control of F.D. Operations/Disasters

R 229 Hazardous Materials Operating Site Practices

R 205 Fire Arson Investigation

R 225 Management of Fire Prevention Programs

R 102 Plans Review for Inspectors

R 352 Developing Fire & Life Safety Strategies

Descriptive research was also conducted through the use of telephone interviews. Departments identified from the survey conducted at the National Fire Academy were telephoned and interviewed as

to the history of their transformational change, procedures they used in making the change, and problems they encountered while making the change. Copies of written SOP's from those fire departments that had made the change from an all-career department into a combination department were also obtained.

Supported by historical and descriptive research, evaluative research was used to explore the change requirements. The purpose of this evaluative research was to explore the problem of how to change the all-career Muscatine Fire Department into a combination department.

Limitations and Assumptions

Limitations included not knowing if the classes surveyed were a true representation of all fire departments in the United States. The survey given to the classes at the National Fire Academy was based on the assumption that questions would be answered accurately.

There has been little previous research in identifying fire departments which have downsized to the point of requiring a transformational change from an all-career department into a combination department. No EFO research papers have been written as to the procedures used and the problems encountered by departments that have made this transformational change. Numerous researches have been done regarding transforming volunteer fire departments into combination departments or combination departments into all-career departments. Thus, this research is limited to only those sources cited herein.

Results

Answers to Research Questions

Question 1. What fire departments in the state of Iowa have gone from an all-career department to a combination department?

A total of two fire departments has been identified as transforming or having attempted to transform from all-career to combination department, Cedar Falls and Fort Madison.

- Cedar Falls, Iowa - The Cedar Falls Fire Department consists of 33 all-career personnel serving a community of about 35,000. Fire department personnel are divided into three shifts of ten personnel each. Shifts work a 56-hour week of 24 hours on/48 off. The first attempt to transform into a combination department occurred in 1994. Initially, there were 40 persons interested in becoming volunteers (paid-on call). This total was reduced to 10 persons who actually became volunteer fire fighters. Today this number has declined to seven (Chief A. Lupkes, telephone interview, March 13, 1998).
- Fort Madison, Iowa - Fort Madison has a population of about 11,500. In 1995, the Fort Madison Fire Department attempted to recruit part-time fire fighters to supplement the 18 all-career fire fighters. Out of the 20 persons initially interested, five persons began the training for the position of part-time fire fighters. Since that time, four of the part-time fire fighters have quit due to the time commitments. As of April 1998, the Fort Madison Fire Department is an all-career fire department (Chief S. Etko, telephone interview, March 31, 1998).

Question 2. What other U.S. fire departments have gone from an all-career department to a combination department?

According to the survey, a number of fire departments were identified as transforming into

combination departments. After conducting telephone interviews with these identified departments, Minnesota and Wisconsin have communities which have undergone the transformation from all-career departments into combination departments - that did not include a merger, absorption, or some other combining of two or more departments into one department.

- Two Rivers, Wisconsin - Two Rivers serves a population of about 13,400. The transformation began about 15 years ago. Through attrition, each shift's personnel was reduced by one fire fighter. Today there are 21 all-career and 15 paid-on-call fire fighters (Chief M. Pohlman, telephone interview, March 27, 1998).

- Austin, Minnesota - Austin has a population of about 23,500. The transformation began over eight years ago with the number of all-career fire fighters having been reduced from 30 personnel to 11. These 11 fire fighters are supported by 24 part-time fire fighters (Chief D. Wilson, telephone interview, March 6, 1998).

- Mankato, Minnesota - Mankato Fire Department serves a population of about 30,000. The transformation into a combination department began in 1988. Through attrition, the 41 all-career fire fighters have been reduced to 18. The department has since added 34 volunteer fire fighters (Assistant Director A. Resift, telephone interview, March 6, 1998).

- Winona, Minnesota - Winona has a population of about 25,000. The fire department began its transformation around 1980. All-career personnel have been reduced from 44 to 21. They are now supported by 26 volunteers (Chief E. Krall, telephone interview, March 6, 1998).

Question 3. What were the procedures used to make the transformation into a combination department?

- Cedar Falls, Iowa - The volunteer fire fighters are assigned to one of the three 24-hour shifts.

Each volunteer must schedule him/herself to work a minimum of 24 hours each month. Administration prefers them to work in two 12-hour blocks. They also prefer them to work 1900-0700 hours or on days when paid personnel have scheduled a day of vacation. The volunteers must attend eight hours of training each month in fire science or related instruction. The volunteers are expected to become certified as Iowa Fire Fighter I within one year of appointment. Entrance requirements include a written exam and physical agility test for the potential volunteer.

- Fort Madison, Iowa - Fort Madison staffs three shifts with 6-5-5 fire fighters respectively.

The part-time fire fighters would have been required to attend one training session each week. They were to have become Iowa certified FF I's within their first year. They would also be expected to attend training in the areas of hazardous materials and confined space. They were to have been paid \$30 for each training session and \$10/hour for each emergency call. Due to the time commitments and belief they could come and go as they pleased, the concept was put on hold.

- Two Rivers, Wisconsin - Two Rivers staffs three shifts of seven all-career fire fighters each.

The paid-on-call fire fighters are not used for staffing purposes. The paid-on-call fire fighters are paged for all fire calls, including automatic alarms. They respond to about 150 emergencies each year. When paged, the paid-on-call fire fighters respond directly to the emergency scene. Paid-on-call persons are paid \$8/hour for training and \$11/hour for emergency responses. There is a three-hour minimum paid for each training or emergency incident. Paid-on-call fire fighters must attend 50% of all emergency calls and at least one training session each month. They must also become Wisconsin certified FF I as soon as possible. The local fire fighters' union assists in the selection process of the paid-on-call fire

fighters.

- Austin, Minnesota - Austin Fire Department utilizes five full time fire fighters during the day (40-hour weeks). There are also two all-career fire fighters who work on each of the three 24-hour shifts. The 24 part-time fire fighters are used as "sleepers." They may come to the station late in the afternoon and stay the night in the fire house. The part-timers are paid \$10 per night and must spend at least two nights per month at the fire house. They are also paged for reports of all structure fires. The part-time fire fighters were paged 49 times last year. They are paid \$9/hour for all training sessions and fire alarms. There is also a pension plan (\$1800/year) established for the part-time fire fighters.

- Mankato, Minnesota - The Mankato Fire Department employs 18 all-career fire fighters. Six of them work a 40-hour week, Monday through Friday. There are four all-career fire fighters on each of the three shifts on duty for 24 hours. The 34 volunteers are used to supplement the shift staffing. Volunteers are required to spend at least three nights a month at the fire house. The volunteers must attend at least one Saturday (six hours) and one evening (three hours) drill each month. Training is done while the volunteers are on duty. The potential volunteers must successfully pass a written, composition, and physical agility test before being granted a final interview.

•Winona, Minnesota - The Winona Fire Department staffs three shifts of six all-career fire fighters each. There are 32 budgeted paid-per-call fire fighters. They start at \$10/hour for emergency calls. They are also paid for training sessions and for attending the state fire school. There are step raises for those who receive their FF I and FF II certifications. On any confirmed structure fire, all personnel, both off-duty career and paid-per-call fire fighters, are paged and expected to respond. The hiring process for the paid-per-call fire fighters is the same as that of the all-career fire fighters.

Question 4. What were some of the problems encountered during the transformational change?

All the above-mentioned fire departments had and are having similar problems. The first problem was with the all-career fire fighters' resistance to the change. Although all the above-mentioned fire departments did not go through fire fighters being laid off the job, there were varying degrees of resistance as shift strength decreased to current levels. In Mankato, the fire fighters were able to get a referendum on the ballot asking the voters whether they wanted full-time fire fighters. The typical scare tactics were used in hope that general voting public would agree to the city providing a full-time all-career fire department. Just prior to the election, the city administrator countered these scare tactics with money scare tactics. When the public was told the cost of providing all-career fire fighters, the public voted with their pocket books and against the all-career fire fighters.

According to the surveyed fire chiefs, most of the fire fighters within the above-mentioned fire departments eventually began to accept their volunteer counterparts. One way some of the departments reduced the friction was by having the all-career fire fighters assist in the selection process of the volunteers. The departments that did not allow input from the all-career fire fighters had more friction

between the two groups.

A second problem the departments encountered was the time commitments placed upon the volunteers. All the above-mentioned fire departments required the volunteers to become certified at a minimum of a FF I level. Most volunteers were required to attend a predetermined amount of training and had to respond to a certain percentage of emergency calls. This led to difficulties in retaining volunteers.

The third problem many of the fire departments encountered was in recruitment. Some chiefs stated this was complicated by a lack of volunteer fire fighter tradition and culture within the community. Although Mankato was able to recruit college students, Cedar Falls students expected to be able to drink beer in the fire house. Chief Mike Pohlman of Two Rivers stated his community had a very low unemployment rate and that it has been difficult to get people to volunteer for only \$11/hour.

None of the surveyed departments had problems in the area of discipline and emergency work assignments. All fire fighters, both career and volunteers, were treated the same regarding disciplinary matters and departmental policies. Although Two Rivers volunteers did not drive apparatus to the emergency scenes, all of the above-mentioned departments' volunteers were expected to perform any or all the normal fire suppression duties.

According to the results of the survey taken at the National Fire Academy in January of 1998, few fire personnel had any personal knowledge of fire departments which had made the transformational change, which may be planning to make the change, or could envision their own department ever making the change. Of the 136 surveys returned, .044% of those surveyed had knowledge of fire departments who had made the transformational change from an all-career department to a combination

department. Of those surveyed, only .03% could envision their own departments making such a change. The following table summarizes the fire departments interviewed as to their budgets, numbers of emergency calls, and type of department. It also includes an average cost each emergency call by dividing the number of emergency calls into the fire department total budget.

Table - 1 Statistical Summary of Interviewed Fire Departments

City	Budget	Emergency		Dept. Type
		Calls	\$/Call	
Winona	\$2,000,000	1,346	\$1,486	Combination
Cedar Falls	1,800,012	1,140	1,579	Combination
Mankato	1,600,000	1,500	1,067	Combination
Fort Madison	837,000	411	2,036	All-career
Austin	920,000	270	3,407	Combination
Two Rivers	1,400,000	855	1,637	Combination
Muscatine	\$1,542,000	1,368	\$1,127	All-career

Discussion

The idea of transforming an all-career fire department into a combination department is uncommon. According to research available in the Learning Resource Center, the idea of transforming a fire department into an entirely different organization involves transforming an all-volunteer department into a combination department or a combination department into an all-career department. Many metropolitan communities are growing at such rapid rates, the fire service that was previously being provided becomes inadequate. This research does not address these issues. However, little has been written in regards to all-career departments downsizing to the point of transforming into combination departments. The survey administered at the National Fire Academy reflects the lack of knowledge fire fighters have of fire departments which have made such a change.

You must "do more with less." How often have these words been spoken throughout the fire service? There reaches a point where doing more with less becomes impossible. The fire department then must either "do less" or receive "more." In the community of Muscatine, due to the elimination of the M & E tax, it may be necessary in the future for the city to do "less with less." If all the city's departmental budgets must be cut by 10%, the Muscatine Fire Department will be faced with a staffing dilemma relative to its full-time personnel.

The idea of magically waving a wand and transforming an all-career fire department into a combination department is unrealistic. One of the comments made by a number of the fire chiefs interviewed was the lack of tradition within their own community in regards to volunteer fire fighters. Their communities did not have a previous culture of volunteerism within the communities' fire service. Chief Etka of Fort Madison stated his community had come to expect a certain level of fire service from

its all-career fire fighters and were not interested in incorporating volunteers into its ranks. The selling of the idea of volunteers or even paid-on-call personnel will be difficult in any community which lacks such a tradition and culture.

Another finding of the research was the transformational resistance of the all-career fire fighters. Most of the departments were unionized. Every department interviewed stated the problems they had in getting the fire fighters to accept the change. In every department interviewed, downsizing was through attrition. No fire fighter was ever laid off from their job. A couple of communities' city officials stated well ahead of time exactly how many all-career fire fighters' positions they intended to eliminate through attrition. This did help to ease the fears and uncertainties. Fire departments that allowed the fire fighters to have input into the selection of the volunteers had better morale and the fire fighters got along better with the volunteers.

How should the volunteers be utilized into the organization? Most departments utilized the volunteers as part of their staffing. The volunteers were expected to be at the fire house a certain amount of hours each month. A few departments had their volunteers respond directly to the emergency scene. In order to keep the best response times, it appears that having the volunteers stay at the fire house a minimum number of hours per month is the best solution. This would also allow for the development of a better team atmosphere due to the inevitable socialization that would go on in the fire house.

All of the departments interviewed stated they had a problem with recruitment and retention of volunteers. Most departments paid their volunteers per emergency call and for training. Those departments that instituted a pension plan for their volunteers indicated somewhat fewer problems in this

area. Over time, the change in the local fire service's culture and the development of a tradition of involving volunteer fire fighters may have a positive effect in recruitment.

The final and unexpected finding of this research was the cost comparison between those who had made the change to a combination department compared to the current cost of the Muscatine Fire Department. Cost benefits from fire inspections, preplanning, and public education were not taken into account. According to the cost per emergency call, only Mankato (\$1,067) had a lower cost per call than Muscatine (\$1,127). (See Table 1).

Recommendations

If in the event the Muscatine City Council is forced to reduce all city budgets, including the fire department's, the council will be faced with a difficult decision in regards to fire protection. One of the options would be to transform the fire department from an all-career department into a combination department through the addition of volunteers. The following recommendations are provided in the event this option is selected:

Recommendation 1. The city leaders, city council and general public must decide what level of fire protection will best serve the city. This should include a specific predetermined number of career fire fighter positions to be eliminated. If all fire personnel are aware in advance of the exact number of positions being eliminated, the stress and anxiety of not knowing this number can be reduced. Hopefully, these positions could be eliminated through attrition and no fire personnel would lose their job(s).

Recommendation 2. To incorporate volunteers into the Muscatine Fire Department, the city's culture in regards to fire protection must be changed. The idea of volunteer fire fighters must give birth to a new tradition of fire volunteerism within the community. An aggressive recruitment program will

need to be instituted. It would serve the best interests of the community and the fire department if the fire fighters' union would take an active role in the recruitment and selection of the volunteer fire fighters.

Recommendation 3. Minimum certifications for the volunteers must be defined. Requiring all volunteer fire fighters to become certified as Iowa State FF I's and EMT-B's within their first two years would be reasonable and appropriate. Minimum monthly training requirements must also be determined and enforced.

Recommendation 4. All departmental SOP's, Rules and Regulations, and disciplinary procedures should be uniformly enforced for both career and volunteer fire fighters. There should also be no differentiation between career and volunteers on the emergency scene in regards to assignments and duties.

Recommendation 5. Volunteers should be scheduled to work a minimum number of hours per month at the fire house. This would assist in keeping emergency response times to a minimum. Ideally, volunteers could be assigned a certain shift. This would encourage a better working relationship and thus improve on the "team" concept.

Recommendation 6. A pay schedule should be instituted for the volunteers. An hourly pay schedule should be set for emergency calls, training, and sleep time. A pension system similar to the one used in Austin, Minnesota, should also be explored.

Recommendation 7. In order to reduce the resistance and stress in making the transformational change, the NFA's "Change Management Model" should be utilized. By the use of analysis, planning, implementation, and evaluation/institutionalism, the chances of a successful transformational change would be greatly enhanced.

References

- Baltic, S. (1992, August). The combination transition. Fire Chief, 60-64.
- Brecht, T. (1998a, March 13). Branstad: M & E phaseout will workout in the end. Muscatine Journal, pp. A3.
- Brecht, T. (1998b, January 24). Making up the gap. Muscatine Journal, pp. A1, A5.
- Bruegman, R. (1998, January). Tax revolt: A trend of the future? Fire Chief, 26-29.
- Bryan, J.L. & Picard, R.C. (Eds.). (1979). Managing fire services. Washington D.C.: International City Management Association
- Carter, H.R. (1990, April). Volunteers at the crossroads. Fire Command, 16-18.
- Castro, J. (1989, September 11). Where did the gung-ho go? Time, 52-56.
- Coleman, R.J. and Granito, J.A. (Eds.). (1988). Managing fire services. Washington D.C.: International City Management Association
- City Finance Act, 1 Ia. Stat. Ann. Section 384.1 (1997).
- City of Muscatine. (1996). Muscatine general fund budget. Muscatine, IA: Author.
- Daniels, K. (1998, January). From tea parties to today: Tax revolt across the country. Fire Chief, 29.
- Dentzer, S. (1996, March 11). The fallout from dumping workers. U.S. News & World Report, 58.
- Federal Emergency Management Agency. (1996). Strategic Management of Change (NFA-SMOC-SM). Emmitsburg, MD: Author.
- Florian, T.S. (1996, August). Scab, mercenary, or professional: what type of fire fighter are you? Fire Engineering, 38-40.
- Granito, J. (1980, Fall). Combination fire departments: A complex issue. Fire Management Review, 1-2,7.

Marinucci, R.A. (1009, August). Transition to a combination department. Fire Engineering, 8-12.

McDermott, T. (1996, November), Privatization and lessons for survival. An Applied Research Project. Emmitsburg, MD: National Emergency Training Center.

Osborne, D. & Gaebler, T. (1993). Reinventing government, how the entrepreneurial spirit is transforming the public sector. New York: Penguin Books.

Rielage, R.R. (1995, January). A winning combination. Fire Chief, 70-73.

Rule, C.H. (1992, January). Consolidation/regionalization: Answers for the future? Fire Chief, 32-34.

Special Tax Provision Act, 1 Ia. Stat. Ann. Section 427B.17 (1997).

Solt, R.H. (1995, November). Taxpayer's rights amendment: How it would affect revenue and spending growth in Iowa cities from FY 95 to FY 96. Muscatine, IA: Author.

Triumph Consulting Inc. (1998). City of Muscatine, Iowa Impact study-loss of M & E Tax revenue. Muscatine, IA: City Hall.

Wakeman, J. (1992, July). Overcoming job loss. USA Today, 5.

APPENDIX

Executive Fire Officer Questionnaire

The following survey will be used to gather data for an Executive Fire Officer research project. This is part of the Executive Fire Officer Program at the national Fire Academy. Thank you for your cooperation.

1. Which best describes your fire department?
 - a. All-paid c. Combination
 - b. Volunteer

2. How many fire suppression personnel does your department have?
 - a. 25-50 c. 100-250
 - b. 50-100 d. over 250

3. What is the population of the area your department serves?
 - a. Under 10,000 d. 30,000-50,000
 - b. 10,000-20,000 e. 50,000-100,000
 - c. 20,000-30,000 f. over 100,000

4. Has your department changed from an all-paid department to a combination department?
 - a. yes (Name of your dept _____)
 - b. no

5. Has there been any discussion within your community or department of changing from an all-paid department to a combination department?
 - a. yes (Name of your dept _____) b. no

6. Do you know of any departments that have changed from an all-paid department to a combination department?
 - a. yes (Name of the dept _____)
 - b. no

7. Could you personally envision your fire department going from an all-paid department to a combination department?
 - a. yes (Name of your dept _____)
 - b. no

If you answered yes to any of the above questions, I would be very interested in interviewing you. This would be very beneficial to my research project. Thank you.

Your name:

Address:

Telephone:

Stephen O'Connor

312 E. 5th

Muscatine, Iowa 52761

319-263-9233